RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/596, 746CSource: IFW16Date Processed by STIC: 09/30/2005

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 09/30/2005 PATENT APPLICATION: US/09/596,746C TIME: 10:54:52

Input Set : A:\2631.1002-001.txt

Output Set: N:\CRF4\09302005\1596746C.raw

```
4 <110> APPLICANT: Raymond J. Dattwyler
 5
        GErald Seinost
 6
        Daniel Dykhuizen
 7
        Benjamin J. Luft
 8
        Maria J.C. Gomes-Solecki
10 <120> TITLE OF INVENTION: Groups of Borrelia Burgdorferi and
        Borrelia Afzelii That Cause Lyme Disease In Humans
14 <130> FILE REFERENCE: 2631.1002-001
16 <140> CURRENT APPLICATION NUMBER: 09/596,746C
17 <141> CURRENT FILING DATE: 2000-06-19
19 <150> PRIOR APPLICATION NUMBER: 60/140,042
20 <151> PRIOR FILING DATE: 1999-06-18
22 <160> NUMBER OF SEQ ID NOS: 2
24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
26 <210> SEO ID NO: 1
27 <211> LENGTH: 192
28 <212> TYPE: PRT
29 <213> ORGANISM: borrelia burgdorferi
31 <400> SEQUENCE: 1
32 Cys Asn Asn Ser Gly Lys Asp Gly Asn Thr Ser Ala Asn Ser Ala Asp
33 1
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                                       10
34 Glu Ser Val Lys Gly Pro Asn Leu Thr Glu Ile Ser Lys Lys Ile Thr
36 Glu Ser Asn Ala Val Val Leu Ala Val Lys Glu Val Glu Thr Leu Leu
                               40
38 Thr Ser Ile Asp Glu Leu Ala Lys Ala Ile Gly Lys Lys Ile Lys Asn
40 Asp Val Ser Leu Asp Asn Glu Ala Asp His Asn Gly Ser Leu Ile Ser
                       70
                                           75
42 Gly Ala Tyr Leu Ile Ser Thr Leu Ile Thr Lys Lys Ile Ser Ala Ile
                                       90
44 Lys Asp Ser Gly Glu Leu Lys Ala Glu Ile Glu Lys Ala Lys Lys Cys
               100
                                   105
46 Ser Glu Glu Phe Thr Ala Lys Leu Lys Gly Glu His Thr Asp Leu Gly
47
                               120
48 Lys Glu Gly Val Thr Asp Asp Asn Ala Lys Lys Ala Ile Leu Lys Thr
                           135
50 Asn Asn Asp Lys Thr Lys Gly Ala Asp Glu Leu Glu Lys Leu Phe Glu
                       150
52 Ser Val Lys Asn Leu Ser Lys Ala Ala Lys Glu Met Leu Thr Asn Ser
                  165
                                       170
54 Val Lys Glu Leu Thr Ser Pro Val Val Ala Glu Ser Pro Lys Lys Pro
55
              180
                                   185
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Input Set : A:\2631.1002-001.txt

Output Set: N:\CRF4\09302005\I596746C.raw

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59 <211> LENGTH: 191
60 <212> TYPE: PRT
61 <213> ORGANISM: borrelia burgdorferi
63 <400> SEQUENCE: 2
64 Asn Ser Gly Lys Gly Gly Asn Thr Ser Ala Asn Ser Ala Asp Glu Ser
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66 Val Lys Gly Pro Asn Leu Thr Glu Ile Ser Lys Lys Ile Thr Glu Ser
              20
68 Asn Ala Val Val Leu Ala Val Lys Glu Ile Glu Thr Leu Leu Ala Ser
                               40
70 Ile Asp Glu Leu Ala Thr Lys Ala Ile Gly Lys Lys Ile Gln Gln Asn
72 Gly Gly Leu Ala Val Glu Ala Gly His Asn Gly Thr Leu Leu Ala Gly
74 Ala Tyr Thr Ile Ser Lys Leu Ile Thr Gln Lys Leu Asp Gly Leu Lys
                                       90
76 Asn Ser Glu Lys Leu Lys Glu Lys Ile Glu Asn Ala Lys Lys Cys Ser
77
               100
78 Glu Asp Phe Thr Lys Lys Leu Glu Gly Glu His Ala Gln Leu Gly Ile
      115
                               120
80 Glu Asn Val Thr Asp Glu Asn Ala Lys Lys Ala Ile Leu Ile Thr Asp
                                               140
82 Ala Ala Lys Asp Lys Gly Ala Ala Glu Leu Glu Lys Leu Phe Lys Ala
                      150
                                           155
84 Val Glu Asn Leu Ala Lys Ala Ala Lys Glu Met Leu Ala Asn Ser Val
                                       170
86 Lys Glu Leu Thr Ser Pro Ile Val Ala Glu Ser Pro Lys Lys Pro
               180
                                   185
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VERIFICATION SUMMARY

DATE: 09/30/2005 TIME: 10:54:53

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